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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ralf-Christian Schlothauer

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EXAMINER

GWARTNEY, ELIZABETH A

ART UNIT

PAPER NUMBER

1781

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,320	Applicant(s) SCHLOTHAUER ET AL.	
	Examiner ELIZABETH GWARTNEY	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,6-12,14-16,19-21,23,27,30-32,37,39,40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,6-12,14-16,19-21,23,27,30-32,37,39,40 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 17, 18, 24, 25, 28, 41 and 43 have been cancelled. **Claims 1-3, 6-12, 14-16, 19-21, 23, 27, 30-32, 37, 29-40 and 42 are pending.**

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. **Claims 1-3, 6-12, 16, 20, 21, 23, 27, 30, 39, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry et al. ("Effect of Exopolysaccharide-Producing Cultures on Moisture Retention in Low Fat Mozzarella Cheese").**

Regarding **claims 1-3**, Perry et al. disclose a starter culture composition for making low-fat cheese comprising *Streptococcus thermophilus* MR-1C and *Lactobacillus delbrueckii* MR-1R (Abstract, p.800/Materials and Methods/Milk and Cultures).

Given Perry et al. disclose lactic acid bacterium, *Streptococcus thermophilus* MR-1C and *Lactobacillus delbrueckii* MR-1R that are capable of producing an exopolysaccharide (EPS) (Abstract, p.799/Introduction/paragraph 3), it is clear that they intrinsically are capable of producing an enzyme that is capable of producing EPS and fermenting lactic acid. Further, given Perry et al. disclose *Streptococcus thermophilus*, since *Streptococcus thermophilus* strains are known to produce EPS (Abstract, p.799/Introduction/paragraph 3), it follows that the *Streptococcus thermophilus* MR-1C disclosed by Perry et al. and *Streptococcus thermophilus* V3 could be used interchangeably.

Regarding the method limitations recited in claims 6-8, it is noted that even though a product-by-process is defined by the process steps by which the product is made, determination of patentability is based on the product itself. *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). As the court stated in *Thorpe*, 777 F.2d at 697, 227 USPQ at 966 (The patentability of a product does not depend on its method of production. *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969). If the product in a product-by-process claim is the same as or obvious from a product of the

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prior art, the claim is unpatentable even though the prior product was made by a different process.). In this case, claim 1 requires a composition comprising an EPS fermentation culture which contains a viable lactic acid microorganism capable of producing EPS. In this case, Perry et al. disclose a composition identical to that presently claimed.

Regarding **claims 9 and 12**, Perry et al. disclose all of the claim limitations as set forth above. Given Perry et al. disclose a composition identical to that presently claimed wherein the lactic acid bacterium is capable of producing EPS, since claim 1 does not require EPS as part of the composition, the limitations of claims 9 and 12 have been met.

Regarding **claim 10**, Perry et al. disclose all of the claim limitations as set forth above. While Perry et al. disclose *Streptococcus thermophilus* MR-1C, the reference does not explicitly disclose the V3 strain. However, given Perry et al. disclose the MR-1C strain produces EPS, it would have been obvious to one of ordinary skill in the art to have used any strain of *Streptococcus thermophilus* known to produce EPS, including the V3 strain, and arrive at the present invention.

Regarding **claim 11**, Perry et al. disclose all of the claim limitations as set forth above. Perry et al. also disclose an adjunct culture comprising EPS producing *Lactococcus lactis ssp. Cremoris*. While Perry disclose *Lactococcus lactis ssp. Cremoris*, the reference does not explicitly disclose the 322 strain. However, given Perry et al. disclose *Lactococcus lactis ssp. Cremoris* produces EPS, it would be obvious to one of ordinary skill in the art to have used any strain of *Lactococcus lactis ssp. Cremoris* known to produce EPS, including the 322 strain, and arrive at the present invention.

Regarding **claim 16**, Perry et al. disclose a method of forming a low-fat Mozzarella cheese comprising adding the composition of claim 1 to milk and forming a

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cheese curd (p.800/Manufacturing Procedure). Perry et al. also disclose a ripened cheese product with about 60% moisture (p.800/Table 1/Starter 4).

Given Perry et al. disclose lactic acid bacterium, *Streptococcus thermophilus* *MR-1C* and *Lactobacillus delbrueckii* *MR-1R* that are capable of producing an exopolysaccharide (EPS) it is clear that the bacterium, i.e. starter culture, would intrinsically produce an enzyme that produces EPS.

Regarding **claim 19**, Perry et al. disclose all of the claim limitations as set forth above and that the EPS cultures are useful to increase moisture retention in low fat Mozzarella cheese (p.804/Conclusions).

Regarding **claim 20**, Perry et al. disclose all of the claim limitations as set forth above. Perry et al. also disclose that the EPS starter culture significantly increases cheese moisture retention, i.e. retards whey release during curd processing (p.801/Cheese Composition).

Regarding **claims 21 and 23**, Perry et al. disclose all of the claim limitations as set forth above. Given Perry et al. disclose a process and starter culture identical to that presently claimed, it is clear that the recited process attributes and improved sensory, nutrition, and/or physical properties would intrinsically be displayed.

Regarding **claim 27**, Perry et al. disclose a method of forming a low-fat Mozzarella cheese comprising adding the composition of claim 1 to milk and forming a cheese curd (p.800/Manufacturing Procedure). Perry et al. also disclose a ripened cheese product with about 60% moisture (p.800/Table 1/Starter 4). Given Perry et al. disclose a method for forming low-fat Mozzarella cheese using a composition identical to that

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presently claimed, it is clear that the cheese curd would intrinsically contain about 50% moisture and lose less than 5% moisture as a result of ripening.

Regarding **claim 30**, Perry et al. disclose all of the claim limitations as set forth above. Perry et al. also disclose a process for *in situ* production of EPS comprising providing a starter culture composition according to claim 1, inoculating vats of milk with the starter culture composition and ripening (i.e. permitting the growth of the microorganisms). Given Perry et al. disclose EPS forming microorganisms identical to those of the present invention, it is clear that the microorganisms would intrinsically produce EPS.

Regarding **claims 39, 40 and 42** Perry et al. disclose all of the claim limitations as set forth above and that the low-fat Mozzarella cheese has 6.0 to 6.4% fat (p.801/Cheese Composition).

6. **Claims 14 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry et al. (“Effect of Exopolysaccharide-Producing Cultures on Moisture Retention in Low Fat Mozzarella Cheese”) and further in view of Degeest et al. (“Exopolysaccharide (EPS) biosynthesis by *Lactobacillus sakei* 0-1: production kinetics, enzyme activities and EPS yields”).**

Regarding **claims 14 and 32**, Perry et al. disclose all of the claim limitations as set forth above. While Perry discloses EPS producing lactic acid bacterium, *Streptococcus thermophilus* and *Lactobacillus delbrueckii*, the reference does not explicitly disclose a culture selected from the recited group.

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Degeest et al. teach that *Lactobacillus sakei* strains are known producers of EPS in food systems (p. 470-471/Abstract, Introduction).

Perry et al. and Degeest et al. are combinable because they are concerned with the same field of endeavor, namely, EPS producing lactic acid bacterium. Given Degeest et al. teach that *Lactobacillus sakei* strains are known producers of EPS, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used any EPS producing lactic acid bacterium, including *Lactobacillus sakei*, and arrive at the present invention.

Regarding strain, while Degeest et al. teach *Lactobacillus sakei* 0-1, the reference does not explicitly disclose the 570 strain. However, given Degeest et al. teach the 0-1 strain produces EPS, it would have been obvious to one of ordinary skill in the art to have used any strain of *Lactobacillus sakei* known to produce EPS, including the 570 strain, and arrive at the present invention.

7. Claim 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry et al. ("Effect of Exopolysaccharide-Producing Cultures on Moisture Retention in Low Fat Mozzarella Cheese") and further in view of Tallgren et al. ("Exopolysaccharide-Producing Bacteria from Sugar Beets").

Regarding **claims 15 and 31**, Perry et al. disclose all of the claim limitations as set forth above. While Perry disclose EPS producing lactic acid bacterium, *Streptococcus thermophilus* and *Lactobacillus delbrueckii*, the reference does not explicitly disclose *Leuconostoc mesenteroides* or a bacterium that produces a homo-EPS.

Tallgren et al. teach that *Leuconostoc mesenteroides* strains are known producers of EPS (p. 862/Abstract, Introduction). Given Tallgren et al. teach *Leuconostoc mesenteroides*, it is clear that the bacterium would intrinsically produce a homo-EPS.

Perry et al. and Tallgren et al. are combinable because they are concerned with the same field of endeavor, namely, EPS producing lactic acid bacterium. Given Tallgren et al. teach that *Leuconostoc mesenteroides* strains are known producers of EPS, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used any EPS producing lactic acid bacterium, including *Leuconostoc mesenteroides*, and arrive at the present invention.

Regarding strain, while Tallgren et al. teach two different *Leuconostoc mesenteroides* strains, the reference does not explicitly disclose the 808. However, given Tallgren et al. teach the strains produce EPS, it would have been obvious to one of ordinary skill in the art to have used any strain of *Leuconostoc mesenteroides* known to produce EPS, including the 808 strain, and arrive at the present invention.

8. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Degeest et al. (“Exopolysaccharide (EPS) biosynthesis by *Lactobacillus sakei* 0-1: production kinetics, enzyme activities and EPS yields”).

Regarding **claim 37**, Degeest et al. disclose a culture of *Lactobacillus sakei* 0-1 (p. 471/Materials and Methods). Given Degeest et al. disclose a *Lactobacillus sakei* culture, since *Lactobacillus sakei* strains are known to produce EPS (p.470-471/Abstract, Introduction), it follows that the *Lactobacillus sakei* 0-1 and *Lactobacillus sakei* DSM 15889 strains are interchangeable.

Response to Arguments

9. Applicants' arguments filed 16 May 2011 have been fully considered but they are not persuasive.

The rejection of claims 1-3, 6-12, 16-21, 23-25, 27-28, 30 and 39-43 under 35 U.S.C.

§103(a) as being unpatentable over Perry et al. is maintained-

Applicants explain that "[t]he difference between Perry and the claimed invention is that the culture includes a lactic acid bacterium selected from the group consisting of *Streptococcus thermophilus* strain V3, *Lactococcus lactis* spp *cremoris* strain 322, *Lactobacillus sakei* strain 570 and *Leuconostoc mesenteroides* strain 80," Applicants note that Perry does not disclose *Streptococcus thermophilus* V3. Applicants find that "[a]dvantageously, by using the specific strains recited in the claims, surprisingly low fat cheeses (such as Danbo) are produced which are not as rubbery and not as insoluble (i.e. crumbly) as low fat cheeses produced without these strains." Applicants argue that because Perry clearly teaches starter cultures used to produce low fat cheeses with good moisture retention (i.e. not rubbery), there would be no motivation for the skilled person to consider using any other type of lactic acid bacterial strains in place of those taught in Perry.

In this case, Perry et al. teach a starter culture composition for making a low-fat cheese comprising lactic acid bacterium that are capable of producing an exopolysaccharide (EPS) including *Streptococcus thermophilus* MR-1C and *Lactobacillus delbrueckii*-MR-1R (Abstract, p. 799/Introduction/paragraph 3). Given Perry et al. disclose *Streptococcus thermophilus* MR-1C, since *Streptococcus*

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thermophilus strains are known to produce EPS, absent evidence to the contrary, it necessarily follows that the *Streptococcus thermophilus* MR-1C strain disclosed by Perry et al. and *Streptococcus thermophilus* V3 could be used interchangeably.

Perry et al. also disclose that the moisture content of cheeses made with EPS-producing starter cultures increased 3% over that of a control cheese (i.e. non EP—producing starter culture - Abstract). Perry et al. concludes that EPS cultures can be useful to increase moisture retention and improve melting properties in low fat mozzarella cheese (p. 804-805/Conclusions). Thus, given Perry et al. disclose generally, EPS cultures are useful to improve moisture retention and melting properties of low fat cheese, it is the Examiner's position that one of ordinary skill in the art would have considered using any strain of EPS producing starter culture bacterium with the expectation of producing a high quality low fat cheese.

Whether evidence shows unexpected results is a question of fact and the party asserting unexpected results has the burden of proving that the results are unexpected. *In re Geisler*, 116 F.3d 1465, 1469-70, 43 USPQ2d 1362, 1364-5 (Fed. Cir.1997). The Applicants have failed to meet their burden.

While Applicants' state that each of the specific strains recited in the claims can produce low-fat cheese which is not as rubbery and not as insoluble (i.e. crumbly) as low fat cheeses produced without these strains, there is no evidence in the record that shows that other viable lactic acid microorganism capable of producing an EPS, as disclosed by Perry et al. would not also have this property. It is not clear if the ability to make non-rubbery low-fat cheese is a result of the specific strain or the type of bacterium, i.e. lactic acid bacteria capable of producing EPS.

Applicants note that Tallgren et al. disclose 170 bacteria which are capable of producing EPS and that it is clear from this document that there is a plethora of lactic acid bacterial strain which produce EPS. Applicants explain that the “contribution of the claimed invention to the art is to teach EPS producing lactic acid bacterial strains which are useful in the production of low-fat cheeses.”

However, Examiner notes that Perry et al. also disclose the usefulness of using a starter culture comprising EPS producing lactic acid bacteria in the production of low fat cheeses. Specifically, Perry et al. disclose that EPS cultures can be useful to increase moisture retention in low fat mozzarella cheese and that increasing moisture content can improve its melting properties.

The rejection of claims 14 and 32 under 35 U.S.C. §103(a) as being unpatentable over Perry et al. and Degeest et al. is maintained-

Applicants note that Degeest et al. disclose that *Lactobacillus sakei* strain 0-1 is capable of producing large amount of EPS (first full paragraph of page 471- Degeest et al.). However, Applicants explain that Degeest et al. does not disclose culturing *Lactobacillus sakei* strain 0-1 in milk and does not suggest the use of the strain in the production of low-fat cheeses. Furthermore, Applicants submit, Degeest et al. does not disclose *Lactobacillus sakei* strain 570 or that it could be used to make low fat cheese.

The Examiner does not use the Degeest reference to teach the use of *Lactobacillus sakei* strain 0-1 in the production of low-fat cheeses, but rather that

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Lactobacillus sakei strains are known EPS producers. Perry et al. already discloses the use of EPS producing lactic acid bacteria to make low fat cheese.

Applicants argue that there is no motivation to combine Perry with Degeest et al. Applicants find that Degeest et al. is in a different field - namely determining optimal conditions for EPS production of the EPS producing lactic acid bacterium *Lactobacillus sakei* strain 0-1.

Applicants' are reminded that according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Degeest et al. is, therefore, a reasonably pertinent reference, because it teaches that there are *Lactobacillus sakei* strains, including strain 0-1, known to produce EPS, which is a function especially pertinent to the invention at hand.

Applicants submit that there "is no motivation in either Degeest or Perry for the skilled person to use *Lactobacillus sakei* strain 570 over and above the plethora of other lactic acid bacterial strains which are known to produce EPS such as *Streptococcus thermophilus* strain MR-1C, *Lactobacillus delbrueckii* MR-1R, *Lactococcus lactis* spp. *Lactis* strains and *Lactococcus lactis* spp. *Cremoris* strains – which Perry actually

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disclose are know to product EPS and which Perry actually uses to produce low-fat cheese.”

Here, Perry et al. disclose that the moisture content of cheeses made with EPS-producing starter cultures increased 3% over that of a control cheese (i.e. non EP—producing starter culture - Abstract). Perry et al. concludes that EPS cultures can be useful to increase moisture retention and improve melting properties in low fat mozzarella cheese (p. 804-805/Conclusions). Thus, given Perry et al. disclose generally, EPS cultures are useful to improve moisture retention and melting properties of low fat cheese, it is the Examiner’s position that one of ordinary skill in the art would have considered using any strain of EPS producing starter culture bacterium with the expectation of producing a high quality low fat cheese.

Applicants provide two references which show that there is a plethora of *Lactobacillus* species (see Appendix A and B). Specifically, Applicants note that about 50 *Lactobacillus* species where known in 1986 and that between 2003 and 2008 thirty-nine *Lactobacillus* species were identified.

It is the Examiner’s position that Applicants note with respect to the number of *Lactobacillus* species known is not germane to the non-final rejection filed December 22, 2010. The Examiner does not suggest that all *Lactobacillus* species could be utilized to make low fat cheese but rather *Lactobacillus* species known to produce EPS in food systems. Perry et al. disclose the usefulness of using a starter culture comprising EPS producing lactic acid bacteria in the production of low fat cheeses. Degeest et al. teach that *Lactobacillus sakei* strains are known producers of EPS in food systems. Given

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Perry et al. teach the usefulness of EPS producing lactic acid bacteria in low fat cheese production, one of ordinary skill in the art would have considered other lactic acid bacteria **which produce EPS** as useful in the production of low fat cheese.

The rejection of claims 15 and 31 under 35 U.S.C. §103(a) as being unpatentable over

Perry et al. and Tallgren et al. is maintained-

Applicants note that Tallgren et al. disclose the isolation of EPS producing bacteria from sugar beet including strains of *Leuconostoc mesenteroides*. However, Applicants explain that Tallgren et al. does not disclose culturing lactic acid bacteria in milk and does not suggest the use of the any of the bacteria in the production of low-fat cheeses. Furthermore, Applicants submit, Tallgren et al. does not disclose *Leuconostoc mesenteroides* strain 808 or that it could be used to produce low-fat cheese.

The Examiner does not use the Tallgren reference to teach the use of *Leuconostoc mesenteroides* in the production of low-fat cheeses, but rather that *Leuconostoc mesenteroides* strains are known EPS producers. Perry et al. already discloses the use of EPS producing lactic acid bacteria to make low fat cheese.

Applicants argue that there is no motivation to combine Perry with Tallgren et al. Applicants find that Tallgren et al. is in a different field - namely isolating bacteria from sugar beets.

Applicants' are reminded that according to MPEP 2141.01 (a), a reference may be relied on as a basis for rejection of an applicants' invention if it is "reasonably pertinent to the particular problem with which the inventor is concerned." A reasonably pertinent reference is further described as one which "even though it maybe in a different field of

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endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." Tallgren et al. is, therefore, a reasonably pertinent reference, because it teaches that there are *Leuconostoc mesenteroides* strains known to produce EPS which is a function especially pertinent to the invention at hand.

The rejection of claim 37 under 35 U.S.C. §103(a) as being unpatentable over Degeest et al. is maintained-

Applicants note that "Degeest disclose optimizing the production of EPS by *Lactobacillus sakei* 0-1 in order to obtain high amounts of EPS by studying the influence of temperature and carbon source on EPS production."

Applicants argue that "[n]owhere in Degeest et al. is the *Lactobacillus sakei* strain 570 taught or suggested. Degeest does not teach or suggest a culture of *Lactobacillus sakei* strain 570 deposited as DSM 15889 at the Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH." Applicants submit that "there is no motivation in Degeest for the skilled person to identify other strains of *Lactobacillus sakei* over and above strain 0-1- let alone identify the specific strain 570." Applicants assert that *Lactobacillus sakei* strain 570 and *Lactobacillus sakei* strain 0-1 are not the same.

It is the examiner's position, given Degeest et al. disclose a *Lactobacillus sakei* culture, since *Lactobacillus sakei* strains are known to produce EPS (p. 470-471/Abstract, Introduction), that the *Lactobacillus sakei* 0-1 and *Lactobacillus sakei* DSM 15889 strains are interchangeable.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH GWARTNEY whose telephone number is (571)270-3874. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1781

/E. G./
Acting Examiner of Art Unit 1781